

ABSTRACT

A collimating device for controlling a radiation field of an X-ray radiated from an X-ray radiator. The device includes a plurality of first collimating leaves, a plurality of second collimating leaves, a beam generator, a detector, a memory, and a controller. The plurality of second collimating leaves oppose the first collimating leaves. The beam generator is configured to generate a beam. The beam emanates between the first collimating leaves and the second collimating leaves. The detector is configured to detect the beam. The memory is configured to store position information of each leaf of the first and second collimating leaves when the each leaf is determined to intersect the beam based on the detection. The controller is configured to position the each leaf based on the position information so as to control the radiation field.